

STUDY: Research on Passenger Car Driver Interactions with Driver Assistance Technologies
STERLING IRB ID: 7780-EMazzae
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Post-Drive Questionnaire – All Participants

Today you drove a vehicle equipped with Advanced Driver Assistance System (ADAS) features. The following questions pertain to your experience driving the vehicle while using those features.

When completing these questions, please keep in mind the meaning of the following words.

An ADAS feature is:

- **“Available”** when it is powered and ready to be engaged.
- **“Unavailable”** when the road conditions are not appropriate for function use or the function is not powered.
- **“Engaged”** if it is actively operating to help control the vehicle.
- **“Disengaging”** if it is about to stop helping to control the vehicle.

Based on your experience during the test drive, please respond to the following statements by selecting the response that corresponds to your level of agreement or disagreement.

These questions pertain to ADAS feature availability, engagement, and disengagement.

The vehicle’s instrument panel visual symbols or messages clearly indicated whether the advanced driver assistance features were **available to engage** (i.e., activate).

Strongly Disagree	Moderately Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Moderately Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The vehicle’s instrument panel visual symbols or messages clearly indicated that the advanced driver assistance features were **engaged** (i.e., actively operating).

Strongly Disagree	Moderately Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Moderately Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

It was always clear to me whether the advanced driver assistance features were **engaged or not engaged**.

Strongly Disagree	Moderately Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Moderately Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The vehicle’s instrument panel visual and auditory indications clearly indicated when the advanced driver assistance features were **disengaging** and that I must resume manual control of driving the vehicle immediately.

Strongly Disagree	Moderately Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Moderately Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Based on your experience during the test drive, please respond to the following statements by selecting the response that corresponds to your level of agreement or disagreement.

These questions pertain to your understanding of how to use the advanced driver assistance features.

The vehicle’s advanced driver assistance features were easy to **engage and disengage**.

Strongly Disagree	Moderately Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Moderately Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

When the advanced driver assistance features **disengaged**, I had adequate time to resume manual control of driving the vehicle.

Strongly Disagree	Moderately Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Moderately Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

It was difficult to learn how to use the advanced driver assistance features.

Strongly Disagree	Moderately Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Moderately Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I often made mistakes engaging the advanced driver assistance features during the experimental drive.

Strongly Disagree	Moderately Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Moderately Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Based on your experience during the test drive, please respond to the following statements by selecting the response that corresponds to your level of agreement or disagreement.

These questions pertain to the longitudinal control performance of the advanced driver assistance feature on the vehicle you drove today.

The **longitudinal control aspect** of the advanced driver assistance feature **performed well**.

Strongly Disagree	Moderately Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Moderately Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The **longitudinal control performance** of the advanced driver assistance feature **performed as I expected**.

Strongly Disagree	Moderately Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Moderately Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I was comfortable allowing the advanced driver assistance feature to control the vehicle's speed and following distance behind other vehicles in traffic.

Strongly Disagree	Moderately Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Moderately Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I felt safe while using the advanced driver assistance feature to control the vehicle's speed and following distance behind other vehicles in traffic.

Strongly Disagree	Moderately Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Moderately Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I trusted the advanced driver assistance feature to control the vehicle’s speed and following distance behind other vehicles in traffic.

Strongly Disagree	Moderately Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Moderately Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Based on your experience during the test drive, please respond to the following statements by selecting the response that corresponds to your level of agreement or disagreement.

These questions pertain to the **lateral control performance** of the advanced driver assistance feature on the **vehicle you drove today**.

The **lateral control** aspect of the advanced driver assistance feature **performed well**.

Strongly Disagree	Moderately Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Moderately Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The **lateral control** aspect of the advanced driver assistance feature **performed as I expected**.

Strongly Disagree	Moderately Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Moderately Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I was comfortable allowing the advanced driver assistance feature to control the vehicle’s lane position in traffic.

Strongly Disagree	Moderately Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Moderately Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I was comfortable with the advanced driver assistance feature’s ability to control the vehicle’s lane position on **straight road segments**.

Strongly Disagree	Moderately Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Moderately Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I was comfortable with the advanced driver assistance feature’s ability to control the vehicle’s lane position on **curved road segments**.

Strongly Disagree	Moderately Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Moderately Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

If you did not feel comfortable with the feature’s performance on either straight or curved road segments, please explain what made you uncomfortable:

I felt safe while the advanced driver assistance feature controlled the vehicle’s lane position in traffic.

Strongly Disagree	Moderately Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Moderately Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I trusted the advanced driver assistance feature to safely control the vehicle’s lane position in traffic.

Strongly Disagree	Moderately Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Moderately Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

(If multiple ADAS features were present)

The advanced driver assistance features **performed well together**.

Strongly Disagree	Moderately Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Moderately Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Based on your experience during the test drive, please answer the following question.

What is your general perception of the advanced driver assistance features that you experienced in your test drive today? Do you have any other thoughts or concerns about the functions?

Do you own a vehicle equipped with advanced driver assistance features?

- Yes No

If you were driving a vehicle equipped with a “self-driving” feature that could automatically steer to maintain the vehicle within the driving lane and follow a prescribed route, accelerate, and brake as needed with the push of a button, how likely would you be to do the following activities while that feature was active?

	Very Unlikely	Somewhat Unlikely	Neither Unlikely nor Likely	Somewhat Likely	Very Likely
Talk to a passenger	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Talk on a mobile phone	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Write and send text or e-mail messages	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Read text or e-mail messages	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Internet browsing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Social media (e.g., Facebook, Twitter)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Read printed material	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Watch videos/movies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Eat food	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stare out the window	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sleep	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>